

The observational study was conducted between September 2007 and December 2009 wherein 770 subjects were selected from the free labour ward of KLE Hospital, Belgaum, Karnataka. After obtaining the ethical approval to carry the study and consent of the subjects, the subjects were screened for the periodontal condition and the data was also recorded from the Hospital birth register.

INCLUSION CRITERIA

- Age group of 18 – 35 years
- Mothers with a singleton gestation

EXCLUSION CRITERIA

- Systemic conditions like diabetes, cardiovascular disorders, hypertension , severe anemia
- Genitourinary tract infections
- Multiple pregnancies
- Pre eclampsia or eclampsia and gestational diabetes

DATA COLLECTION

- Data collected from Hospital case records - Age, Hb%, obstetric history, gestational age and sex and birth weight of the newborn
- Structured questionnaire survey - Education, adverse oral habits and h/o dental treatment
- Antenatal care – information recorded from antenatal records provided from the mother

Periodontal examinations were performed using the World Health Organisation criteria. The periodontal status of the mother was recorded using Community Periodontal Index.

COMMUNITY PERIODONTAL INDEX (CPI)

This index is based on a modification of the earlier used Community Periodontal Index of Treatment Needs (CPITN). The modification is done by the inclusion of measurement of “Loss of Attachment” and elimination of the “Treatment Needs” category.

Indicators

Three indicators of periodontal status are used for this assessment; gingival bleeding, calculus and periodontal pockets.

A specially designed lightweight CPI probe with 0.5 mm ball tip is used, with a black band between 3.5 and 5.5 mm and rings at 8.5 and 11.5 mm from the ball tip. (This probe is the earlier known “CPITN-C”probe).

Procedure

Sextants: The mouth is divided into sextants, as in the case of CPITN, defined by tooth numbers, 18-14, 13-23, 24-28, 38-34, 33-43 and 44-48. A sextant is examined only if there are two or more teeth present which are not indicated for extraction. (Note: This replaces the former instruction to include single remaining teeth in the adjacent sextant).

Index teeth: For adults aged 20 years and over, the teeth to be examined are:

17	16	11	26	27
47	46	31	36	37

The two molars in each posterior sextant are paired for recording and, if one is missing, there is no replacement. If no index teeth or tooth is present in a sextant qualifying for examination, all the remaining teeth in that sextant are examined and the highest score is recorded as the score for the sextant.

Examination and Recording

The index teeth, or all remaining teeth in a sextant where there is no index tooth, should be probed and the highest score recorded in the appropriate box. The scoring criteria is as follows:

Code 4: Pathological pocket of 6mm or more. The colored end of the CPITN probe is not visible. If the designated tooth / teeth are found to have 6 mm or deep pockets in the sextant examined, and code 4 is given to the sextant, there is no need to record the presence or absence of pathological pockets of 4 mm or 5 mm, calculus or bleeding.

Code 3: Pathological pocket of 5 mm or less, that is only a part of the colored band is visible. If the deepest pocket is between 3.5 mm and 5.5 mm found in a designated tooth / teeth and code 3 is given, there is no need for recording calculus or bleeding.

Code 2: The whole of the colored band of the probe is visible, but supragingival or subgingival calculus or other plaque retentive factors such as ill fitting crowns or defective margin of a filling are either seen or felt during probing shallow pockets only. If no pockets which involve or exceed the colored area of the CPITN probe and supra or

subgingival calculus or other plaque retentive factor are detected, and code 2 is given, it is not necessary to examine for gingival bleeding.

Code 1: Bleeding elicited during or after gentle probing without calculus or pocketing being present.

Code 0: Healthy periodontal tissues.

Code X: When only one tooth or no teeth are present in a sextant (third molars are excluded unless they function in place of second molars).

SCORE	CRITERIA
0	Healthy
1	Bleeding observed, directly or by using a mouth mirror, after probing.
2	Calculus detected during probing, but all of the black band on the probe visible
3	Pocket \leq 5 mm (gingival margin within the black band on the probe)
4	Pocket \geq 6 mm or more (black band on the probe not visible)
X	Excluded sextant (less than two teeth present)
9	Not recorded